3.9.6. CBPA-O: CHESAPEAKE BAY PRESERVATION AREA OVERLAY

A. PURPOSE

This section was enacted to implement the requirements of section 10.1-2100 et seq. of the Code of Virginia (The Chesapeake Bay Preservation Act). The Chesapeake Bay and its tributaries constitute an important and productive estuarine system, providing economic and social benefits to the citizens of the City of Norfolk and the Commonwealth of Virginia. The health of the Chesapeake Bay is vital to maintaining the city's economy and the welfare of its citizens. The intent of the city and the purposes of the Overlay District are to: (1) protect existing high quality state waters; (2) restore all other state waters to a condition or quality that will permit all reasonable public uses and will support the propagation and growth of all aquatic life, including game fish, which might reasonably be expected to inhabit them; (3) safeguard the clean waters of the Commonwealth from pollution; (4) prevent any increase in pollution; (5) reduce existing pollution; and (6) promote water resource conservation in order to provide for the health, safety, and welfare of the present and future citizens of the city.

The regulations of this district shall be in addition to and shall overlay all other zoning districts where they are applied so that any parcel of land lying in the Chesapeake Bay Preservation Area Overlay District shall also lie in one or more of the other zoning districts provided for by this Ordinance.

B. DEFINITIONS

The following words and terms used in the Overlay District have the following meanings, unless the context clearly indicates otherwise. Words and terms not defined in this section but defined in Article 8, Definitions and Rules of Measurement, shall be given the meanings set forth therein.

(1) Beach

The shoreline zone comprised of unconsolidated sandy material as defined in section 28.2-1400 of the Code of Virginia.

(2) Best Management Practice (BMP)

A practice, or a combination of practices, that is determined by the city to be the most effective, practical means of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality goals.

(3) Buffer Area

An area of natural or established vegetation managed to protect other components of a resource protection area and state waters from significant degradation due to land disturbances.

(4) Buildable Area

The portion of the lot remaining after required yards, buffer areas, and BMP areas have been provided but in no event shall the buildable area be less than 1,200 sq. ft. for lots of over 5,000 sq. ft. For lots under 5,000 sq. ft., the minimum buildable area shall be as determined by the ZA.

(5) Chesapeake Bay Preservation Area (CBPA)

Any land designated by the city pursuant to Part III of the Chesapeake Bay Preservation Area Designation and Management Regulations, 9 VAC 10-20-70, and section 10.1-2107 of the Code of Virginia. A Chesapeake Bay Preservation Area shall consist of a resource protection area and a resource management area.

(6) Chesapeake Bay Preservation Area Buffer (CBPA Buffer)

A 100-foot vegetated buffer area located adjacent to and landward of tidal wetlands, non-tidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow, tidal shores, and along both sides of any water bodies with perennial flow. This 100-foot buffer area shall consist of two 50 foot areas. The area measured 50 ft. from the jurisdictional wetland line shall be called the 50-foot seaward buffer while the remainder of the buffer area shall be called the 50-foot landward buffer. This includes the RPA and IDA.

(7) Coastal Primary Sand Dune

A mound of unconsolidated sandy soil as defined in section 28.2-1400 of the Code of Virginia.

(8) Construction Footprint

The area of impervious surface including, but not limited to, buildings, roads and drives, parking areas, and sidewalks and the area necessary for construction of such improvements.

(9) Construction Impact Zone

A 10-foot wide area adjacent to any structure's footprint.

(10) Development

The construction, or substantial alteration, of residential, commercial, industrial, institutional, recreation, transportation, utility facilities or structures, or public streets, curbs or sidewalks.

(11) Diameter at Breast Height (DBH)

A method of measuring the size of an existing tree. Diameter is measured at 4.5 ft. above the ground adjacent to the tree.

(12) Impervious Cover

A surface composed of any material that significantly impedes or prevents natural infiltration of water into the soil. Impervious surfaces include, but are

not limited to: roofs, buildings, streets, parking areas, and any concrete, asphalt, or compacted gravel surface.

(13) Infill

Utilization of vacant land in previously developed areas.

(14) Intensely Developed Area (IDA)

Area where development is concentrated and little of the natural environment remains and where at least one of the following conditions existed on or before March 3, 1992: development has severely altered the natural state of the area such that it has more than 50 percent impervious surface; public sewer and water systems, or a constructed stormwater drainage system, or both, have been constructed and served the area on or before March 3, 1992; or housing density is equal to or greater than 4 dwelling units per acre. Intensely Developed Areas are designated as an overlay on the Chesapeake Bay Preservation Area, as depicted in the Chesapeake Bay Preservation Areas Supplemental Working Map, as periodically amended.

(15) Land Disturbing Activity or Land Disturbance

Any land change including, but not limited to, clearing, grading, excavating, transporting and filling of land, or other construction activities which would disturb the natural vegetation or the existing contours of the land, which may result in soil erosion from water or wind and the movement of sediments into public or private storm drainage systems or waters of the state.

(16) Nonpoint Source Pollution

Pollution consisting of constituents such as sediment, nutrients, and organic and toxic substances from diffuse sources, such as runoff from land development and use.

(17) Nontidal Wetlands

Those wetlands other than tidal wetlands that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, as defined by the U.S. Environmental Protection Agency pursuant to section 404 of the federal Clean Water Act, in 33 CFR 328.3b.

(18) Public Road

A publicly owned road designed and constructed in accordance with policies, procedures and criteria of the Virginia Department of Transportation, including regulations promulgated pursuant to (1) the Erosion and Sediment Control Law (section 10.1-560 et seq. of the Code of Virginia) and (2) the Virginia Stormwater Management Act (section 10.1-603 et seq. of the Code of Virginia). This definition includes those roads where the Virginia

Department of Transportation exercises direct supervision over the design or construction activities, or both, and cases where secondary roads are constructed or maintained, or both, by the City of Norfolk in accordance with city standards.

(19) Redevelopment

The process of developing land that is or has been previously developed.

(20) Resource Management Area (RMA)

That component of the Chesapeake Bay Preservation Area that is not classified as the resource protection area. RMAs include land types that, if improperly used or developed, have the potential for causing significant water quality degradation or for diminishing the functional value of the resource protection area. The RMA is adjacent to and landward of the CBPA buffer.

(21) Resource Protection Area (RPA)

That component of the Chesapeake Bay Preservation Area comprised of lands adjacent to water bodies with perennial flow that have an intrinsic water quality value due to the ecological and biological processes they perform or are sensitive to impacts which may result in significant degradation to the quality of state waters.

(22) Substantial Alteration

An expansion or modification of a building or development that would result in a disturbance of land exceeding an area of 2,500 sq. ft. in the Resource Management Area only.

(23) Tidal Shore or Shore

Land or shoreline stabilization structure contiguous to a tidal body of water between the mean low water level and the mean high water level.

(24) Tidal Wetlands

Vegetated and non-vegetated wetlands as defined in section 28.2-1300 of the Code of Virginia.

(25) Utilities

Natural gas, electrical power, cable television, telephone, water, stormwater, and sewer service.

(26) Water-Dependent Facility

A development of land that cannot exist outside of the CBPA buffer and must be located on the shoreline by reason of the intrinsic nature of its operation. These facilities include, but are not limited to: (1) ports; (2) the intake and outfall structures of power plants, water treatment plants, sewage treatment plants, and storm sewers; (3) marinas and other boat docking

structures; (4) beaches and other public water-oriented recreation areas; and (5) fisheries or other marine resources facilities.

(27) Water Body with Perennial Flow

A body of water that flows in a natural or man-made channel year-round during a year of normal precipitation.

(28) Wetlands

Tidal and nontidal wetlands.

C. APPLICABILITY

(1) Areas of Applicability

The Chesapeake Bay Preservation Area Overlay District shall apply to all lands identified as CBPAs as designated by the city and as shown for administrative and demonstrative purposes on the official zoning map and the Chesapeake Bay Preservation Areas supplemental working map.

(a) Resource Protection Area

The resource protection area includes: tidal wetlands; nontidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow; tidal shores; and a 100-foot vegetated buffer area to be known as the CBPA Buffer, located adjacent to and landward of these components, and along both sides of any water bodies with perennial flow.

The CBPA buffer area shall consist of two 50 foot areas. The area measured 50 ft. from the RPA components shall be called the 50-foot seaward buffer while the remainder of the buffer area shall be called the 50-foot landward buffer. Development within the RPA shall restore the CBPA buffer accordance with the mitigation requirements of this section.

(b) Resource Management Area

The resource management area includes land that, if improperly used or developed, has the potential for causing significant water quality degradation or for diminishing the functional value of the resource protection area. The RMA is adjacent to and landward of the CBPA buffer and extends landward to include the remainder of the lot or parcel designated as a resource protection area. When the landward boundary of the CBPA buffer falls within an improved public right-ofway, the RMA is defined as the remainder of the improved public right-of-way.

When the CBPA buffer boundary falls within a flag lot subdivision, unimproved public right-of-way, coastal primary sand dune or beach, the RMA shall extend landward to the first improved public right-of-way.

(c) Intensely Developed Area

Generally, intensely developed areas shall serve as redevelopment areas in which development is concentrated on or before March 3, 1992. IDAs shall be areas as identified on the Zoning Map of the city or as determined by the ZA with the assistance of the Bureau of Environmental Services and that meet one of the following criteria:

- (i) Development has severely altered the natural state of the area such that it has more than 50% impervious surface;
- (ii) Public sewer and water systems, or a constructed stormwater drainage system, or both, have been constructed and served the area on or before March 3, 1992. This condition does not include areas planned for public sewer and water or constructed stormwater drainage systems; or
- (iii) Housing Density is equal to or greater than four dwelling units per acre.

IDAs shall include: tidal wetlands; nontidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow; tidal shores; and a 100-foot vegetated buffer area, to be known as the CBPA Buffer, located adjacent to and landward of the components listed in subsections (i) through (iii), above, and along both sides of any water bodies with perennial flow. Areas so designated and where development is proposed shall comply with all erosion and sediment control requirements, performance standards for redevelopment, and CBPA buffer restoration/mitigation as required in this section.

(2) Conflict with Other Regulations

In any case where the requirements of the Chesapeake Bay Preservation Area Overlay District conflict with any other provision of the City Code or existing state or federal regulations, whichever imposes the more stringent restrictions shall apply.

D. EXEMPTIONS FROM CHESAPEAKE BAY PRESERVATION AREA DEVELOPMENT CRITERIA

(1) Public Utilities, Railroads, Public Roads, and Public Facilities

Public Utilities, Railroads, Public Roads, and Public Facilities shall be exempted from CBPA development criteria provided that:

- (a) Construction, installation, operation, and maintenance of electric, natural gas, fiber optic, and telephone transmission lines, railroads, and public roads, and their appurtenant structures are in accordance with:
 - (i) Regulations promulgated pursuant to the Erosion and Sediment Control Law (Code of Virginia, section 10.1-560 et seq.) and the

Stormwater Management Act (Code of Virginia, section 10.1-603.1 et seq.);

- (ii) An erosion and sediment control plan and a stormwater management plan approved by the Virginia Department of Conservation and Recreation; or,
- (iii) Local water quality protection criteria at least as stringent as the above stated requirements.
- (b) In addition to satisfying the provisions of subsection (a), above, public roads shall be optimally designed and aligned, consistent with all applicable requirements, to prevent or otherwise minimize the encroachment in the Resource Protection Area and to minimize the adverse effects on water quality.

(2) City of Norfolk or Regional Service Authority Water, Sewer, Natural Gas and Underground Telecommunications and Cable Television Lines

City of Norfolk or Regional Service Authority Water, Sewer, Natural Gas and Underground Telecommunications and Cable Television Lines shall be exempted from CBPA development criteria provided that:

- (a) To the degree possible, the location of such utilities and facilities are sited outside of the CBPA buffer;
- (b) No more land shall be disturbed than is necessary to provide for installation of the proposed utility;
- (c) All such construction, installation and maintenance of such utilities and facilities shall be in compliance will all applicable local state and federal permits and designed and conducted in a manner that protects water quality; and,
- (d) Any land disturbance or land disturbing activity exceeding an area of 2,500 sq. ft. shall comply with all erosion and sediment control requirements of Chapter 15 of the City Code.

(3) Other Land Disturbing Activities

The following land disturbances or land disturbing activities in the CBPA buffer may be exempted from the Overlay District: (1) water wells; (2) passive recreation facilities such as boardwalks, trails, and pathways; and (3) historic preservation and archaeological activities, provided that it is demonstrated to the satisfaction of the ZA that:

- (a) Any required permits shall have been issued;
- (b) Sufficient and reasonable proof is submitted that the intended use will not deteriorate water quality or adversely impact significant vegetation or trees within the CBPA buffer.
- (c) The intended use does not conflict with nearby planned or approved uses; and

(d) Any land disturbance or land disturbing activity exceeding an area of 2,500 sq. ft. shall comply with all erosion and sediment control requirements of Chapter 15 of the City Code.

E. DISTRICT BOUNDARY INTERPRETATIONS AND DELINEATIONS

(1) Relevant Maps

The official zoning map and the Chesapeake Bay Preservation Areas supplemental working map show the general location of CBPA-O and must be consulted by persons contemplating development, redevelopment, or land disturbing activities within the city prior to engaging in such activities.

(2) Lot or Parcel Included Within Boundaries of CBPA

If the boundaries of a CBPA include a portion of a lot or parcel, the entire lot or parcel shall comply with the requirements of the Overlay District. The subdivision of property shall not constitute an exemption from this requirement.

(3) Lot or Parcel Not Included Within Boundaries of a CBPA

If land within the City of Norfolk meets the definition of a component of the CBPA-O but is not identified on the supplemental working map, it is hereby designated to be within the boundaries of the CBPA-O and regulated under the provisions of this section.

(4) Interpretation of CBPA Boundaries

(a) Delineation by the Applicant

The site-specific boundaries of the CBPA buffer shall be determined by the applicant through the performance of an environmental site assessment, subject to approval by the ZA and in accordance with Section 2.4.18, Major Site Plan. The official zoning map and the Chesapeake Bay Preservation Areas supplemental working map shall be used as a guide to the general location of the CBPA-O.

(b) Delineation by the Zoning Administrator

At the request of an applicant, the ZA with the assistance of the Bureau of Environmental Services may elect to perform the delineation of the environmental features on the site, e.g., tidal wetlands, tidal shores, and nontidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow. The applicant is responsible for incorporating this information into the environmental site assessment.

(c) Where Conflict Arises Over Delineation

Where the applicant has provided a site-specific delineation of the CBPA buffer, the ZA, with the assistance of the Bureau of Environmental Services, will verify the accuracy of the boundary delineation. In

determining the site-specific CBPA buffer boundary, the ZA may render adjustments to the applicant's boundary delineation. In the event the adjusted boundary delineation is contested by the applicant, the applicant may seek relief by appealing such administrative decision to the BZA. Appellants shall be given a reasonable opportunity to present their case to the BZA and to submit technical evidence to support their case. The ZA may submit technical data and information to the BZA to support the decision.

F. PERMIT AND APPLICATION REQUIREMENTS

All permit applications for development within the CBPA areas shall be accompanied by the following documentation:

(1) New Single-Family Residences

(a) Site Plan

The site plan shall be prepared by a design professional and shall contain the following information:

- (i) A topographical survey showing all improvements, elevations, wetlands, and any slopes or elevation changes to the site.
- (ii) Delineated CBPA buffer area locating all existing trees of 4 inches or greater at diameter breast height.
- (iii) Flood zone delineation and determination note.
- (iv) All proposed improvements and impervious surfaces.
- (v) Drainage design indicating how the property will drain to the right of way or an adjacent body of water.
- (vi) Stormwater management features.
- (vii) A landscape plan showing all required mitigation plantings.
- (viii) All required notes.
- (ix) All required E&S measures, including tree protection and site access, or an agreement in lieu of a plan.
- (x) Limits of disturbance.
- (xi) Any additional information required by the Bureau of Environmental Services.
- (b) Water Quality Impact Assessment
- (2) Residential Additions and Accessory Structures
 - (a) Survey

The survey shall show all existing and proposed improvements.

(b) Landscape Plan

The landscape plan shall show the location of all required plantings.

(c) Water Quality Impact Assessment

A water quality impact assessment shall be included, if required by the Bureau of Environmental Services.

(3) All Other Development

(a) Site Plan

The site plan shall be prepared by a design professional and shall include all information required for major site plan review according to Section 2.4.18, Major Site Plan.

(b) Water Quality Impact Assessment

G. USE REGULATIONS

Principal permitted uses, uses permitted by special exception, accessory uses, and special requirements shall be as established by the underlying zoning district, unless specifically modified by the requirements set forth in this section.

H. LOT SIZE AND THE CREATION OF LOTS

(1) Minimum Lot Size

Minimum lot size shall be subject to the requirements of the underlying zoning district.

(2) New Lots in the RPA

New lots shall not be created within the RPA unless a buildable area, as defined by this Ordinance, can be created outside of the entire CBPA buffer.

(3) New Lots in the IDA

New lots shall not be created within the IDA unless a buildable area, as defined by this Ordinance, can be created outside of the 50-foot seaward CBPA buffer.

I. PERFORMANCE STANDARDS FOR DEVELOPMENT

(1) Purpose and Intent

The performance standards establish the means to minimize erosion and sedimentation potential, reduce land application of nutrients and toxics, and maximize rainwater infiltration. Natural ground cover, especially woody vegetation, is most effective in holding soil in place and preventing site erosion. Indigenous vegetation, with its adaptability to local conditions without the use of harmful fertilizers or pesticides, filters stormwater runoff. Minimizing impervious cover enhances rainwater infiltration and effectively reduces stormwater runoff potential.

The purpose and intent of these standards are to establish criteria to implement the following objectives: prevent a net increase in nonpoint source pollution from development and achieve a ten-percent reduction in nonpoint source pollution from redevelopment.

Site-specific standards for development and redevelopment in the RPA, IDA and RMA shall be met as per Section 3.96.J, General Development Standards, below.

(2) General Performance Standards for Development and Redevelopment

- (a) Land disturbance or land disturbing activity shall be limited to the area necessary to provide for the proposed use, development or redevelopment.
- (b) Indigenous vegetation shall be preserved to the maximum extent possible consistent with the use, development or redevelopment permitted in accordance with the "Virginia Erosion and Sediment Control Handbook," 1988, as amended and in accordance with the requirements of Chapter 45 of the City Code.
- (c) Land development or redevelopment shall minimize impervious cover to promote infiltration of stormwater into the ground consistent with the use, development or redevelopment permitted.
- (d) Notwithstanding any other provisions of this section or exceptions or exemptions thereto, any land disturbance or land disturbing activity exceeding 2,500 sq. ft., including construction of all single-family houses, septic tanks, and drainfields, shall comply with the requirements of the Erosion and Sediment Control Ordinance (Chapter 15) of the City Code.
- (e) For any development or redevelopment, stormwater runoff shall be controlled by the use of best management practices that achieve the standards of Section 41.2 of the Norfolk City Code, "Virginia Stormwater Management Program", and in compliance with the Virginia Stormwater Management Regulations of the Virginia Administrative Code.
- (f) Prior to any land disturbance, development, redevelopment or land disturbing activity on any portion of a lot or parcel, all wetland, dune and beach permits required by federal, state, and local laws and regulations shall be obtained and evidence of such submitted to the ZA.
- (g) Roads and driveways not meeting the definition of public road in Section 3.9.6.B, Definitions, and not exempt under Section 3.9.6.D, Exemptions from Chesapeake Bay Preservation Area Development Criteria, may be constructed in or across the CBPA buffer if each of the following conditions is met:
 - (i) The ZA makes a finding that there are no reasonable alternatives to aligning the road or driveway in the CBPA buffer;

- (ii) The alignment and features of the road or driveway are designed, consistent with other applicable requirements, to minimize encroachment into the CBPA buffer and minimize adverse effects on water quality;
- (iii) The proposed road alignment and design are reviewed in accordance with the provisions of site plan review in Section 2.4.18, Major Site Plan; and
- (iv) The design and construction of the road or driveway satisfy all applicable criteria of this Article.

(3) Required Conditions

- (a) All development and redevelopment including all single-family houses shall be subject to the approval of a site plan in accordance with the site plan review provisions in Section 2.4.18, Major Site Plan, and Section 2.4.19, Minor Site Plan.
- **(b)** Development in RPAs may be allowed only if it satisfies one of the following:
 - (i) Is a new or expanding water-dependent use that satisfies the following criteria:
 - (A) It does not conflict with the comprehensive plan;
 - (B) It complies with the general performance standards;
 - (C) Any non-water dependent component is located outside of RPAs; and
 - **(D)** Access to the water dependent facility will be provided with the minimum disturbance necessary; and where practicable, a single point of access is provided.
 - (ii) Constitutes redevelopment;
 - (iii) Constitutes development or redevelopment within a designated Intensely Developed Area;
 - (iv) Is a permitted development, activity, or improvement established pursuant to Section 3.9.6.L, Existing Structures Located Within the CBPA, and 3.9.6.M, Variances.
- (c) A major water quality impact assessment shall be required for any proposed development or redevelopment within RPAs and for any development within RMAs when required by the ZA because of the unique characteristics of the site or intensity of development, in accordance with the site plan review provisions in Section 2.4.18, Major Site Plan.
- (d) Redevelopment outside locally designated Intensely Developed Areas shall be permitted in the RPA only if there is no increase in the amount of impervious cover and no further encroachment within the RPA, and it

shall conform to applicable erosion and sediment control and stormwater management criteria in accordance with all erosion and sediment control requirements in Chapter 15 of the City Code and the Virginia Stormwater Management Regulations, as well as all applicable stormwater management requirements of other state and federal agencies.

(4) Flood Control and Stormwater Management Facilities

Flood control and stormwater management facilities that drain or treat water from multiple development projects or from a significant portion of a watershed may be allowed in Resource Protection Areas, where the following conditions are met:

- (a) The location of the facility is the optimum location;
- **(b)** The size of the facility is the minimum necessary to provide necessary flood control, stormwater treatment, or both;
- (c) The facility is consistent with a stormwater program approved by the Virginia State Water Control Board;
- (d) All applicable state and federal permits are obtained from the appropriate federal and state agencies having jurisdiction;
- (e) Approval is received from the ZA prior to construction; and
- (f) Routine maintenance is performed on such facilities to assure that they continue to function as designed.

(5) Virginia Stormwater Management Program Construction General Permits

For all projects not subject to either the continuation of Virginia Stormwater Management Program Construction General Permits or the grandfathering provisions set forth in the Virginia Administrative Code, the stormwater management criteria consistent with the water quality protection provisions of Section 41.2 of the Norfolk City Code, "Virginia Stormwater Management Program" and the Virginia Stormwater Management Regulations of the Virginia Administrative Code shall be satisfied. A project constructed under the provisions of a Virginia Stormwater Management Program Construction General Permit shall comply with the water quality standards in effect as of the date of registration under the General Permits Program. A project constructed under the grandfathering regulations of the Virginia Administrative Code shall comply with the provisions of Section 41.2 of the Norfolk City Code, "Virginia Stormwater Management Program".

- (a) The following stormwater management options shall be considered to comply with this requirement:
 - Incorporation on the site of best management practices that meet the water quality protection requirements set forth in Section 41.2 of the Norfolk City Code, "Virginia Stormwater Management Program";

- (ii) Compliance with a locally adopted regional stormwater management plan or program, which may include a Virginia Stormwater Management Program (VSMP) permit issued by the Department of Environmental Quality to a local government for its municipally owned separate storm sewer system discharges, that is reviewed and found by the Virginia State Water Control Board to achieve water quality protection equivalent to that required by this subsection; and
- (iii) Compliance with a site-specific VSMP permit issued by the Department of Environmental Quality, provided that the Director of Public Works specifically determines that the permit requires measures that collectively achieve water quality protection equivalent to that required by this subsection.
- (b) Any maintenance, alteration, use or improvement to an existing structure that does not degrade the quality of surface water discharge, as determined by the Director of Public Works, may be exempted from the requirements of this subsection.
- (c) Stormwater management criteria for redevelopment shall apply to any redevelopment, whether or not it is located within the CBPA-O designated by the City of Norfolk.

(6) On-Site Sewage Treatment Systems

On-site sewage treatment systems not requiring a Virginia Pollutant Discharge Elimination System (VPDES) permit shall:

- (a) Have pump-out accomplished for all such systems at least once every five years;
 - (i) If deemed appropriate by the Norfolk Health Department and subject to conditions the Norfolk Health Department may set, the Norfolk Health Department may offer to the owners of such systems, as an alternative to the mandatory pump-out, the option of having a plastic filter installed and maintained in the outflow pipe from the septic tank to filter solid material from the effluent while sustaining adequate flow to the drainfield to permit normal use of the septic system. Such a filter should satisfy standards established in the Sewage Handling and Disposal Regulations (12 VAC 5-610) administered by the Virginia Department of Health.
 - (ii) Furthermore, in lieu of requiring proof of septic tank pump-out every five years, the Norfolk Health Department may allow owners of on-site sewage treatment systems to submit documentation every five years, certified by a sewage handler permitted by the Virginia Department of Health, that the septic system has been inspected, is functioning properly, and the tank does not need to have the effluent pumped out of it.

- (b) For new construction, provide a reserve sewage disposal site with a capacity at least equal to that of the primary sewage disposal site. This reserve sewage disposal site requirement shall not apply to any lot or parcel recorded prior to October 1, 1989, if the lot or parcel is not sufficient in capacity to accommodate a reserve sewage disposal site, as determined by the Norfolk Health Department. Building shall be prohibited on the area of all sewage disposal sites until the structure is served by public sewer or an on-site sewage treatment system which operates under a permit issued by the department of environment quality. As an alternative to the 100% reserve sewage disposal site, the Health Department may offer the owners of such systems the option of installing an alternating drainfield system meeting the following conditions:
 - (i) Each of the two alternating drainfields in the system shall have, at a minimum, an area not less than fifty percent of the area that would otherwise be required if a single primary drainfield were constructed.
 - (ii) An area equaling 50% of the area that would otherwise be required for the primary drainfield site must be reserved for subsurface absorption systems that utilize a flow diversion device, in order to provide for future replacement or repair to meet the requirements for a sewage disposal system. Expansion of the primary system will require an expansion of this reserve area.
 - (iii) The two alternating drainfields shall be connected by a diversion valve, approved by the Norfolk Health Department, located in the pipe between the septic (aerobic) tank and the distribution boxes. The diversion valve shall be used to alternate the direction of effluent flow to one drainfield or the other at a time. However, diversion valves shall not be used for the following types of treatment systems:
 - (A) Sand mounts;
 - (B) Low-pressure distribution systems;
 - (C) Repair situations when installation of a valve is not feasible; and
 - **(D)** Any other approved system for which the use of a valve would adversely affect the design of the system, as determined by the Norfolk Health Department.
 - (iv) The diversion valve shall be a three-port, two-way valve of approved materials (i.e., resistant to sewage and leak proof and designed so that the effluent from the tank can be directed to flow into either one of the two distribution boxes).

- (v) There shall be a conduit from the top of the valve to the ground surface with an appropriate cover to be level with or above the ground surface.
- (vi) The valve shall not be located in driveways, recreational courts, parking lots, or beneath sheds or other structures.
- (vii) In lieu of the aforementioned diversion valve, any device that can be designed and constructed to conveniently direct the flow of effluent from the tank into either one of the two distribution boxes may be approved if plans are submitted to the Norfolk Health Department and found to be satisfactory.
- (viii) The Norfolk Health Department shall require that the owner(s) alternate the drainfields every twelve months to permit the yearly resting of half of the absorption system.
- (ix) The Norfolk Health Department shall ensure that the owner(s) are notified annually of the requirement to which the valve to the opposite drainfield.

J. GENERAL DEVELOPMENT STANDARDS

(1) Buffer Area Requirements

To minimize the adverse effects of human activities on the other components of the CBPA-O, state waters, and aquatic life, a 100-foot buffer area of vegetation (CBPA buffer) that is effective in retarding runoff, preventing erosion, and filtering nonpoint source pollution from runoff shall be retained if present and established where it does not exist in both RPA and IDA areas. The buffer area shall be located adjacent to and landward of other RPA/IDA components and along both sides of any water body with perennial flow.

(2) Buffer Restoration Requirements

Where vegetation is proposed to be removed from the CBPA buffer area, CBPA Buffer restoration shall be provided as required for development as outlined in Table 3.9.6(A), Buffer Restoration Planting Units. For the purposes of buffer restoration and mitigation, one planting unit shall equal the three values identified in Table 3.9.6(A), Buffer Restoration Planting Units.

TABLE 3.9.6(A): BUFFER RESTORATION PLANTING UNITS One planting unit equals:			

When determined by the Bureau of Environmental services, specific plantings may be substituted or replaced depending on the site conditions of the property and where different plantings will have significant impact on prohibiting erosion or improve water quality.

(3) Tree Mitigation Requirements

Tree mitigation is based upon the guidelines established in Table 3.9.6(B), Tree Mitigation Requirements, which consider tree size class, species, and location. For the purposes of this section, the construction impact zone (CIZ) is a 10-foot-wide area adjacent to any structure's footprint. Large canopy tree species (LCT) are those that reach at least 60 feet in height at maturity. Small canopy species (SCT) are those that reach less than 35 feet in height at maturity.

TABLE 3.9.6(B): TREE MITIGATION REQUIREMENTS		
Size Class of Tree Removed	Tree Mitigation Requirement	
Single Family	and Additions	
Mitigation for trees locate	ed within building footprints	
0-12 in. DBH	One 1.5 in. caliper tree (LCT)	
13-24 in. DBH	Two 1.5 in. caliper trees (LCT)	
25-35 in. DBH	Three 1.5 in. caliper trees (LCT)	
Mitigation for trees located v	vithin construction impact zone	
0.42 in DB1	Two 1.5 in. caliper trees	
0-12 in. DBH	(1 LCT + 1 SCT)	
13-24 in. DBH	Four 1.5 in. caliper trees	
	(2 LCT + 2 SCT)	
25.25 (Six 1.5 in. caliper trees	
25-35 in. DBH	(3 LCT + 3 SCT)	
Site Plan D	evelopment	
0-12 in. DBH	Two 1.5 in. caliper trees (LCT)	
13-24 in. DBH	Four 1.5 in. caliper trees (LCT)	
25-35 in. DBH	Six 1.5 in. caliper trees (LCT)	

(4) Trees Removed Without a Permit

Where trees are removed without first acquiring a permit from the Department of City Planning, the tree mitigation required by Table 3.9.6(B), Tree Mitigation Requirements, shall be doubled.

(5) Significant Specimen Trees

Existing trees with a DBH of 36 inches or greater are considered large specimen trees and shall be maintained on site. When determined by the Bureau of Environmental Services where site constraints do not allow avoidance, mitigation is influenced by tree condition and a tree risk assessment performed by an ISA Certified Arborist. The following formula shall be utilized to determine mitigation for significant specimen trees: (Diameter/3) = # of replacement large canopy trees.

(6) Dead or Dying Trees

Existing trees that are determined by an ISA Certified Arborist to be dead or dying, shall be replaced at a rate of 1 new tree for every dead or dying tree.

(7) Substitution Guidelines

- (a) The mitigation requirements specified in Table 3.9.6(B), Tree Mitigation Requirements, may be substituted at the following rate: 1 LCT = 2 SCT = 10 large growing shrubs (6-8 ft. height and/or width at maturity) provided that no less than one half of mitigation planting shall consist of trees.
- (b) The ZA may allow monetary substitution of any required plantings if the required plantings cannot physically fit in or be appropriately sited in the buffer area or on the property.

(8) CBPA Accessory Structure Encroachment Fees

Development of accessory structures within the CBPA shall be subject to fees as noted in the City Code.

K. SPECIFIC DEVELOPMENT STANDARDS WITHIN THE CBPA AREAS

(1) Resource Protection Areas

(a) New Development

On zoning lots located in the RPA that have not been previously developed or have been created after the adoption of this Ordinance, new development must meet the following criteria:

- (i) All structures and impervious surfaces must be located outside of the CBPA buffer.
- (ii) All construction activity and the limits of disturbance that encroaches into the CBPA buffer shall be the minimum necessary to develop the zoning lot.
- (iii) The CBPA buffer shall be reestablished with plantings equal to one planting unit (see subsection J(2), above) per every 400 square feet of impervious surfaces on the lot.

(b) Redevelopment

On zoning lots located in the RPA that have been previously developed or were created prior to the adoption of this Ordinance, redevelopment and substantial improvements must meet the following criteria:

(i) All proposed principal structures shall be located at the front yard setback to minimize encroachment into the CBPA buffer if the proposed structure is located within the CBPA buffer area.

- (ii) All structures and impervious surfaces shall be located outside of the 50-foot seaward CBPA buffer to the greatest extent possible. No impervious encroachment within 25 feet of jurisdictional wetlands.
- (iii) Proposed encroachment into the seaward CBPA buffer shall be limited to the same distance and size as the impervious area encroachment that previously existed with the prior development on the parcel.
- (iv) The CBPA buffer shall be re-established with vegetation equal to one planting unit (see subsection J(2), above) per every 400 square feet of impervious surface within the CBPA Buffer.

(c) Additions to Existing Buildings Not Considered to be Substantial Improvements

On zoning lots located in the RPA that are currently developed and the proposed renovations or additions are not deemed a substantial improvement, improvements shall meet the following criteria:

(i) Single-Family Detached Development

- (A) All additions shall not extend into the 50-foot seaward CBPA buffer or 25 feet from the jurisdictional wetlands, whichever is greater, unless approved under the provisions of Section 3.9.6.L.
- (B) Encroachment may be permitted within the 50-foot seaward CBPA buffer if impervious area exists within the 50-foot seaward CBPA buffer and will be removed as part of this development. No impervious encroachment may be permitted within 25 feet of jurisdictional wetlands.
- (C) All additions shall be located in a manner as to not impact any existing buffer area vegetation.
- (D) The 100-foot CBPA buffer shall be re-established with vegetation equal to one planting unit (see subsection J(2), above) per every 400 square feet of proposed new impervious surface on the lot.

(ii) All Other Development

- (A) All additions shall not extend into the 50-foot seaward CBPA buffer or 30 feet from the jurisdictional wetlands, whichever is greater, unless approved under the provisions of Section 3.9.6.L.
- (B) Encroachment may be permitted within the 50-foot seaward CBPA buffer if existing impervious area exists within the 50-foot seaward CBPA buffer and will be removed as part of this

- development. No impervious encroachment may be permitted within 30 feet of jurisdictional wetlands.
- (C) All additions shall be located in a manner as to not impact any existing buffer area vegetation.
- (D) The 100-foot CBPA buffer shall be re-established with vegetation equal to one planting unit (see subsection J(2), above) per every 400 square feet of proposed new impervious surface on the lot.

(d) Accessory Structures

Accessory structures shall be located outside of the CBPA buffer area.

(2) Intensely Developed Areas

(a) New Development

On zoning lots located in the IDA that have not been previously developed or have been created after the adoption of this Ordinance, new development must meet the following criteria:

- (i) All structures and impervious surfaces must be located outside of the 50-foot seaward CBPA buffer
- (ii) All construction activity and the limits of disturbance that encroaches into the CBPA buffer shall be the minimum necessary to develop the zoning lot.
- (iii) The CBPA buffer shall be re-established with vegetation equal to one planting unit or one planting unit (see subsection J(2), above) per every 400 square feet of impervious surfaces in the CBPA buffer, whichever is greater.

(b) Redevelopment

On zoning lots located in the IDA that have been previously developed or were created prior to the adoption of this Ordinance, redevelopment and substantial improvements must meet the following criteria:

(i) Single-Family Detached Development

- (A) All proposed principal structures shall be located at the front yard setback to minimize encroachment into the CBPA buffer if the proposed structure is located within the CBPA buffer area.
- (B) All encroachment into the 50-foot seaward CBPA buffer shall be limited to the same distance and size as the impervious area encroachment that previously existed with the prior development on the parcel or 25 feet from jurisdictional wetlands, whichever is greater.

(C) The CBPA buffer shall be re-established with vegetation equal to one planting unit or one planting unit (see subsection J(2), above) per every 400 square feet of impervious surfaces in the CBPA buffer, whichever is greater.

(ii) All Other Development

- (A) Development shall be permitted into the 50-foot landward buffer.
- (B) All encroachment into the 50-foot seaward buffer shall be limited to the same distance and size as the impervious area encroachment that previously existed with the prior development on the parcel or 30 feet from jurisdictional wetlands, whichever is greater.
- (C) The CBPA buffer shall be re-established with plantings equal to one planting unit (see subsection J(2), above) or one planting unit per every 400 square feet of impervious surfaces in the CBPA buffer, whichever is greater.

(c) Additions to Existing Buildings Not Deemed to be Substantial Improvements

On zoning lots located in the IDA that are currently developed and the proposed renovations or additions are not deemed a substantial improvement, improvements shall meet the following criteria:

(i) Single-Family Detached Development

- (A) All additions shall not extend into the 50-foot seaward CBPA buffer or 25 feet from jurisdictional wetlands, whichever is greater, unless approved under the provisions of Section 3.9.6.L.
- **(B)** All additions shall be located in a manner to not impact any existing buffer area vegetation.
- (C) The CBPA buffer shall be re-established with vegetation equal to one planting unit (see subsection J(2), above) or one planting unit per every 400 square feet of impervious surfaces in the CBPA buffer, whichever is greater.

(ii) All Other Development

- (A) All additions shall not extend any closer to the CBPA features than the existing impervious surface or 30 feet from the jurisdictional wetlands, whichever is greater.
- **(B)** All additions shall be located in a manner to not impact any existing buffer area vegetation.
- (C) The CBPA buffer shall be re-established with vegetation equal to one planting unit (see subsection J(2), above) or one

planting unit per every 400 square feet of impervious surfaces in the CBPA buffer, whichever is greater.

(d) Accessory Structures to Single-Family Residences

- (i) Accessory structures shall be located outside of the 50-foot seaward CBPA buffer area unless the proposed accessory structure is replacing existing impervious in the CBPA buffer area. No structures shall be located within 25 feet of jurisdictional wetlands.
- (ii) The CBPA buffer shall be re-established with vegetation equal to one planting unit (see subsection J(2), above) or one planting unit per every 400 square feet of impervious surfaces in the CBPA buffer, whichever is greater.

L. EXISTING STRUCTURES LOCATED WITHIN THE CBPA

(1) Nonconforming Structures and Development Waivers for Buildings or Structures Within the CBPA Buffer

The lawful use of a building or structure which existed on March 3, 1992, or which exists at the time of any amendment to the Chesapeake Bay Preservation Area Overlay District and which is in conformity with other provisions of the zoning ordinance but which is not in conformity with the provisions of the Overlay District may be continued; however, any alteration, replacement of a nonconforming building or structure in the CBPA buffer shall require a development waiver.

- (a) The ZA, with the recommendation of the Bureau of Environmental Services may grant a development waiver for principal buildings or structures on legal nonconforming lots or parcels to provide for remodeling, alterations or additions, provided that:
 - (i) There will be no net increase in nonpoint source pollution load;
 - (ii) Any land disturbance or land disturbing activity exceeding an area of 2,500 square feet complies with all erosion and sediment control requirements of Chapter 15 of the City Code;
 - (iii) Relief from the requirements are the minimum necessary to afford relief:
 - (iv) Granting the waiver does not confer upon the applicant any special privileges that are denied by this Article to similarly situated property owners in the CBPA;
 - (v) The approval is consistent with the purpose and intent of the CBPA and is not of substantial detriment to water quality;
 - (vi) The request is not based upon conditions or circumstances that are self-created or self-imposed;

- (vii) Reasonable and appropriate conditions are imposed, as warranted, that will prevent the allowed activity from causing degradation of water;
- (viii) CBPA buffer restoration is provided in accordance with this section; and
- (ix) Other findings, as appropriate and required by the ZA, are met.
- **(b)** An application for a development waiver shall be made to the ZA and shall include the following information:
 - (i) Name and address of applicant and property owner;
 - (ii) Legal description of the property and type of proposed use and development;
 - (iii) A survey of the dimensions of the lot or parcel, location of buildings or structures, and proposed additions relative to the lot lines, and boundary of the resource protection area; and
 - (iv) Location and description of any existing private water supply or sewage system.
- (c) A development waiver shall become null and void twelve months from the date issued if no substantial work has commenced.

M. VARIANCES

(1) Request for Variance

A request for a variance from the requirements of this Overlay District shall be made in writing to the Board of Zoning Appeals. It shall identify the impacts of the proposed exception on water quality and on lands within the RPA through the performance of a minor water quality impact assessment. For purposes of this section only, a minor water quality impact assessment shall include a site survey to scale which shows:

- (a) The location of the components of the CBPA buffer, including the 50-foot and 100-foot buffer area;
- (b) The location and nature of the proposed encroachment into the buffer area including type of paving material, areas of land disturbance or land disturbing activity, location of any structures, drives, or impervious cover, and sewage disposal systems or reserve drain field sites; and
- (c) The type and location of proposed best management practices to mitigate the proposed encroachment.

(2) Consideration by the Board of Zoning Appeals

In considering a request for variance, the Board of Zoning Appeals shall consider the requirements as set forth in Section 2.3.5.B(6)(b), CBPA-O and FPCH-O District Variances.